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ABSTRACT

Results of research investigations on sex differences suggest that: (1) those few differences which exist are average group differences; (2) biological and sociocultural factors are possible influences on observed sex differences; and (3) research on sex differences is basically inconclusive. Research examining these differences is inextricably intertwined with social policy, suggesting that the "whys" of sex differences are related to the "whys" of sexually differential status in American society. (Author/HLM)

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Research on Sex-Related Differences and Its Social Policy Implications

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Research examining differences between the sexes is inextricably entwined with social policy. Social concerns motivate much of this research and existing social policy makes assumptions about the differences between males and females and has implications for sex roles in our society. Hence, we would do well to consider explicitly the social implications of research in this area, as well as other areas of importance to women.

Many have demonstrated that social and behavioral scientists pay too little attention to addressing social policy concerns, or even to drawing the social policy implications of the research we conduct (e.g., Cohen & Weiss, 1977; Crain, 1976). Feminist researchers are just as prone as other researchers to this neglect, though we cannot afford to perpetuate this model. Social policy is based upon whatever information is available to legislators and policy makers. Unfortunately, sexist myths are frequently among the available information. To have an impact on social policy, feminist researchers must conduct

investigations which address social policy issues as well as make explicit the social policy implications of our research, whether or not the research was designed to address a current societal concern. Any research has potential policy implications. What the results mean and do not mean must be explicitly drawn.

The Current Status of Research on Sex-Related Differences in Psychological Variables

Maccoby and Jacklin, in their book published in 1974, concluded that there was solid evidence for sex differences with very few variables. Despite the controversy which followed (e.g., Block,1976; Hoffman, 1977),this conclusion remains unchanged: the psychological characteristics of males and females appear to be more similar than different. New research, different methodology, or changes in our society may produce a different conclusion in the future.

At the present time, there appear to be average differences between the sexes with three cognitive and two personality variables. Reliable differences have been found with measures of spatial visualizing performance, mathematics achievement, and some aspects of verbal performance such as fluent production. Aggression and self-esteem are two personality veriables for which there is some evidence of male-female differences.

Explanations for Sex-Related Differences

The various explanations for the currently apparent differences between the sexes are at least as controversial as their existence. These explanations range from biological to socio-cultural, and include the possibility that some differences at least are methodological artifacts due to biassed measurement procedures. (These categories of explanation are reviewed in a forthcoming volume edited by Michele Wittig and myself titled Sex-Related Differences in Cognitive Functioning: Developmental Issues.)

Frequently, it has been assumed that the psychological differences between the sexes are related directly to the biological differences. Efforts to identify the mechanisms by which biological sex is related to differences in psychological characteristics have generally focused on factors which would explain male superiority. For example, it has been hypothesized that spatial ability among males is due to the transmission of this trait on the X-chromosome, making the trait more frequent among males (Bock & Kolakowski, 1973). (Recent studies, by the way, have failed to replicate the early evidence supporting this hypothesis. See Vandenberg and Kuse (1979) for a review.) To testosterone is attributed the sex difference in aggression, which some claim is responsible for the higher sociopolitical status of males. Most proponents of such biological explanations also assume that the sex differences are immutable. The logic here is faulty, since biological

influences, like sociocultural influences, can change over time. (See Petersen, 1979b, for a discussion of this.)

Historically, societies and cultures have supported social roles differentiated on the basis of sex. In large part, it is likely that different roles were based on the reproductive capacity of women, involving them more than men in childrearing functions. Only with decreased childbearing has it been possible for women to have more time for other activites. It appears, however, that sex roles have always been more differentiated, and especially less egalitarian, than any biologically functional differences would predict. The sex-typing of tasks together with socialization into sex roles make it likely that males and females learn sexually-differential behaviors, though at the time of their review, Maccoby and Jacklin (1974) failed to find evidence for sex differences through socialization.

There is some evidence that biological factors, sex hormones and brain lateralization, maybe related to the cognitive sex differences (reviewed in Petersen, 1979a, 1979b). There is accumulating recent evidence, however, for the influences of experience and motivation, both clearly related to sexually-differential socialization (Fennema & Sherman, 1977; Fox, Tobin, & Brody, 1979; Jacklin, 1979). Indeed, these sociocultural factors might also influence biological factors, especially brain development. An interactional model for biopsychosocial development is the appropriate one to test the current hypo-

theses for sex differences in cognitive functioning (Petersen, 1979a).

Except for the slight possibility that the sex hormones play some role with aggression, sex role socialization appears the likeliest explanation for the sex differences in personality variables (reviewed in Petersen, 1979a). Boys and men are expected to be aggressive and dominant while the lower status of women is bound to create self-esteem problems. More research is needed, however, to document the development of these sexually-differential characteristics.

What is most interesting about the research focusing on the etiology of sex differences is what has not been investigated. Until very recently, biological factors have been investigated far more than sociocultural ones to explain the sex differences in cognition. The new research, primarily conducted by female investigators, has begun to link previous findings from socialization research to performance outcomes with the cognitive tasks showing sex differences (e.g., Fox, Tobin & Brody, 1979). These results show how the different socialization experiences of boys and girls lead both to performance differences and to differences in self-esteem. The paucity of such socialization research until recently led to the erroneous conclusion based on a primarily biological literature that the differences were biologically influenced. My reconstruction of the history of this research leads me to speculate that biological explanations were studied in hopes of finding evidence which would support the status quo.

Let me summarize what we currently know about sex differences. First, there aren't nearly as many differences as people believe there are. Second, those few differences that exist are average group differences; inferences about individuals on the basis of these group differences are never justified. Third, research on explanations for sex differences is inconclusive and both biological and sociocultural factors should be considered for now as possible influences on the observed sex differences; a contribution from one type of influence does not rule out some influence from the other.

Implications for Social Policy

We find nothing in the current literature on sex-related differences that would justify the use of sex as a criterion for differential treatment on a societal basis. A philosopher colleague of mine recently cautioned me against arguing too strongly for equal treatment, stating that there are some areas where preferential treatment should be maintained. At first her argument reminded me of Phyllis Schafly's opposition to the ERA on the grounds that women would lose existing "protections" such as alimony. But upon reflection, I must agree that we should be careful that what we propose as social policy does not hurt some women. For example, we might find in our research that there is no maternal instinct, but until substantial numbers of men become more active in child care, it only confuses the issue to consider both mother and father for pregnancy leaves. Similarly, given that women

bear the children and that existing contraceptive devices for women are insufficiently safe and effective, I would prefer to see research monies spent on contraceptives for women rather than diverting funds to contraceptives for men. Past inequities need to be corrected before equality henceforth is a possibility.

Finally, I wish to interject a note of pessimism. Doing everything "right" may still be insufficient. We could conduct the right research on the right issues and commuicate our results in the right way to policy makers but still have insignificant impact on social policy. I was deeply impressed (and depressed!) by Gloria Steinam's article in the July (1978) issue of Ms. titled "Far from the Opposite Shore, Or How to Survive Though a Feminist." Things are changing but the next stage of the battle is likely to be more difficult. To this point we have simply discovered what we want. Making significant changes in our society is going to be much more difficult because those in power perceive that this requires that they give up something. The whys of sex differences are related, I believe, to the whys of sexually differential status in our society. Understanding the whys and changing them are worth the frustrating battle.

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